FIG. 1

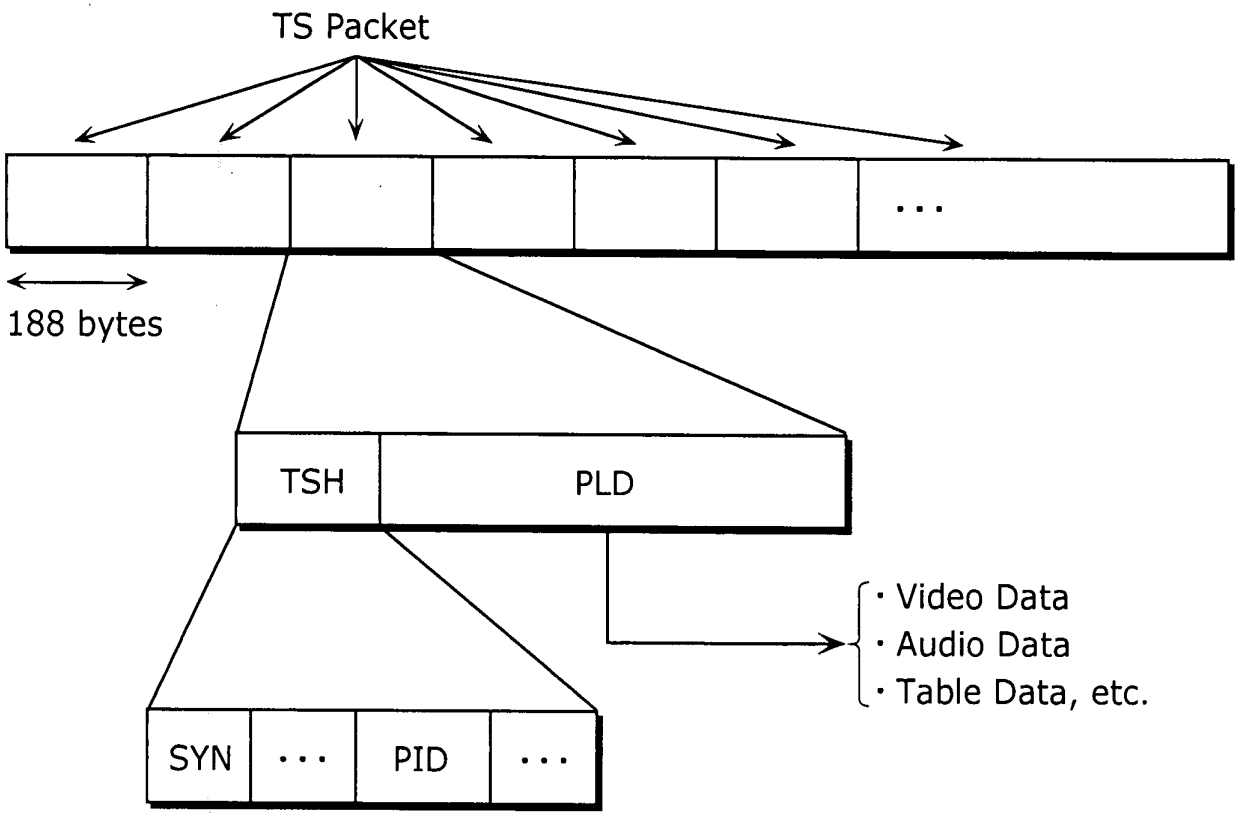

TS Packet
188 bytes
TSH
PLD
SYN
PID
· Video Data
· Audio Data
· Table Data, etc.

FIG. 2

Data Structure of Table Data

```
TS_program_map_section() {
        table_id                                        8 bit
        . . .
        for (i=0; i<N1; i++) {
                stream_type                             8 bit
                reserved                                1 bit
                elementary_PID                         13 bit
                reserved                                4 bit
                ES_info_length                         12 bit
                for (j=0; j<N2; j++) {
                        descriptor ()
                }
        }
        CRC_32                                         32 bit
}
```

FIG. 3

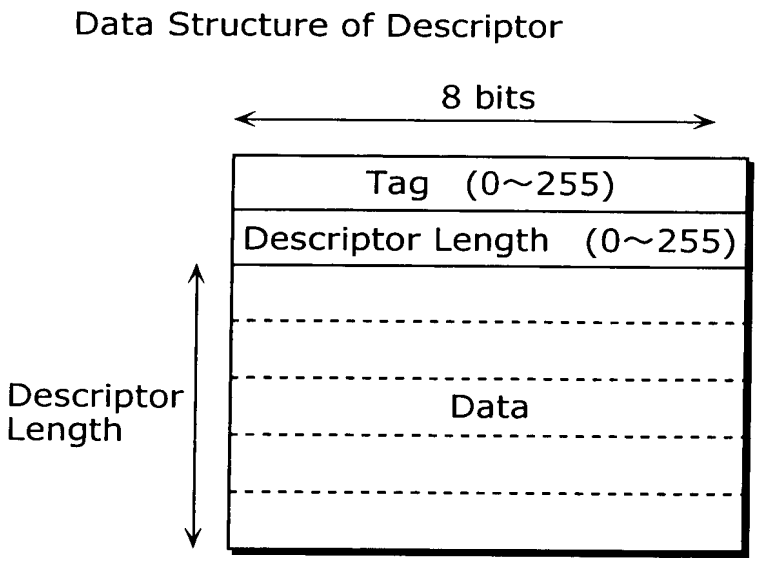

Data Structure of Descriptor
8 bits
Tag (0~255)
Descriptor Length (0~255)
Data
Descriptor Length

FIG. 4

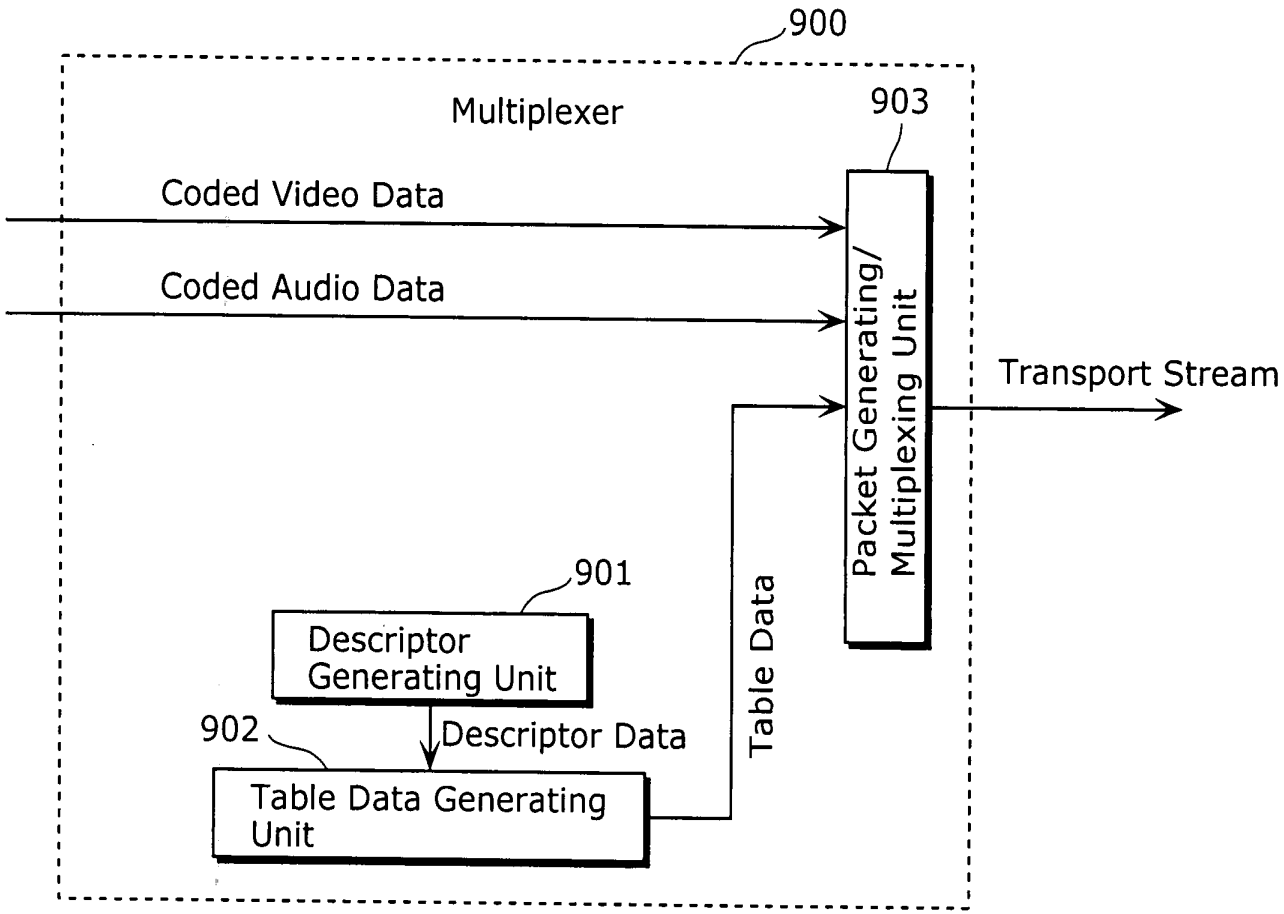

900
Multiplexer
903
Coded Video Data
Coded Audio Data
Packet Generating/ Multiplexing Unit
Transport Stream
901
Descriptor Generating Unit
Descriptor Data
902
Table Data Generating Unit
Table Data

FIG. 5

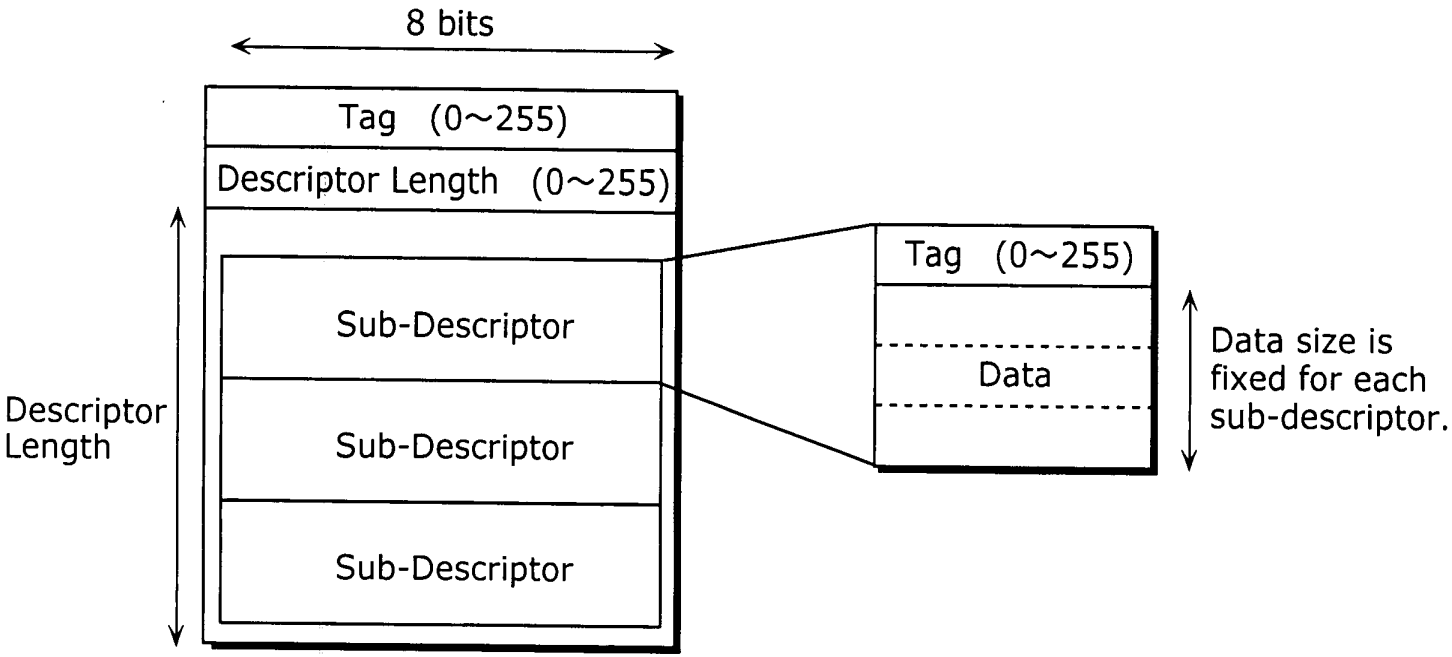

8 bits
Tag (0~255)
Descriptor Length (0~255)
Sub-Descriptor
Sub-Descriptor
Sub-Descriptor
Descriptor Length
Tag (0~255)
Data
Data size is fixed for each sub-descriptor.

FIG. 6

Regulation Details of Sub-Descriptor in T-Standard 1.0 ver.

Tag Value	Detail described in Sub-Descriptor
0	regarding profile
1	regarding buffer capacity of decoder
2	regarding packetization
3~255	(reserved)

FIG. 7

Regulation Details of Sub-Descriptor in T-Standard 1.0 ver.

Tag Value	Detail described in Sub-Descriptor
0	regarding profile
1	regarding buffer capacity of decoder
2	regarding packetization
3	regarding profile adding constraint
4~255	(reserved)

FIG. 8

Tag	Tag Value
Descriptor Length	14 bytes
Sub-Descriptor	Tag Value 0
	Side Information (regarding profile)
Sub-Descriptor	Tag Value 3
	Side Information (regarding profile adding constraint)
Sub-Descriptor	Tag Value 1
	Side Information (regarding buffer capacity of decoder)
Sub-Descriptor	Tag Value 2
	Side Information (regarding packetization)

FIG. 9

Field Name	Bit Length	Description
descriptor_tag	8	tag value indicating AVC descriptor
descriptor_length	8	size of AVC descriptor (※ This is a "sub-descriptor" so that there is size information)
profile_idc	8	profile number
constraint_set0_flag	1	Tools except a tool regulated in pace line profile are not to be used.
constraint_set1_flag	1	Tools except a tool regulated in main profile are not to be used
constraint_set2_flag	1	Tools except a tool regulated in extended profile are not to be used.
reserved	5	Reserved
⋮	⋮	⋮

FIG. 10

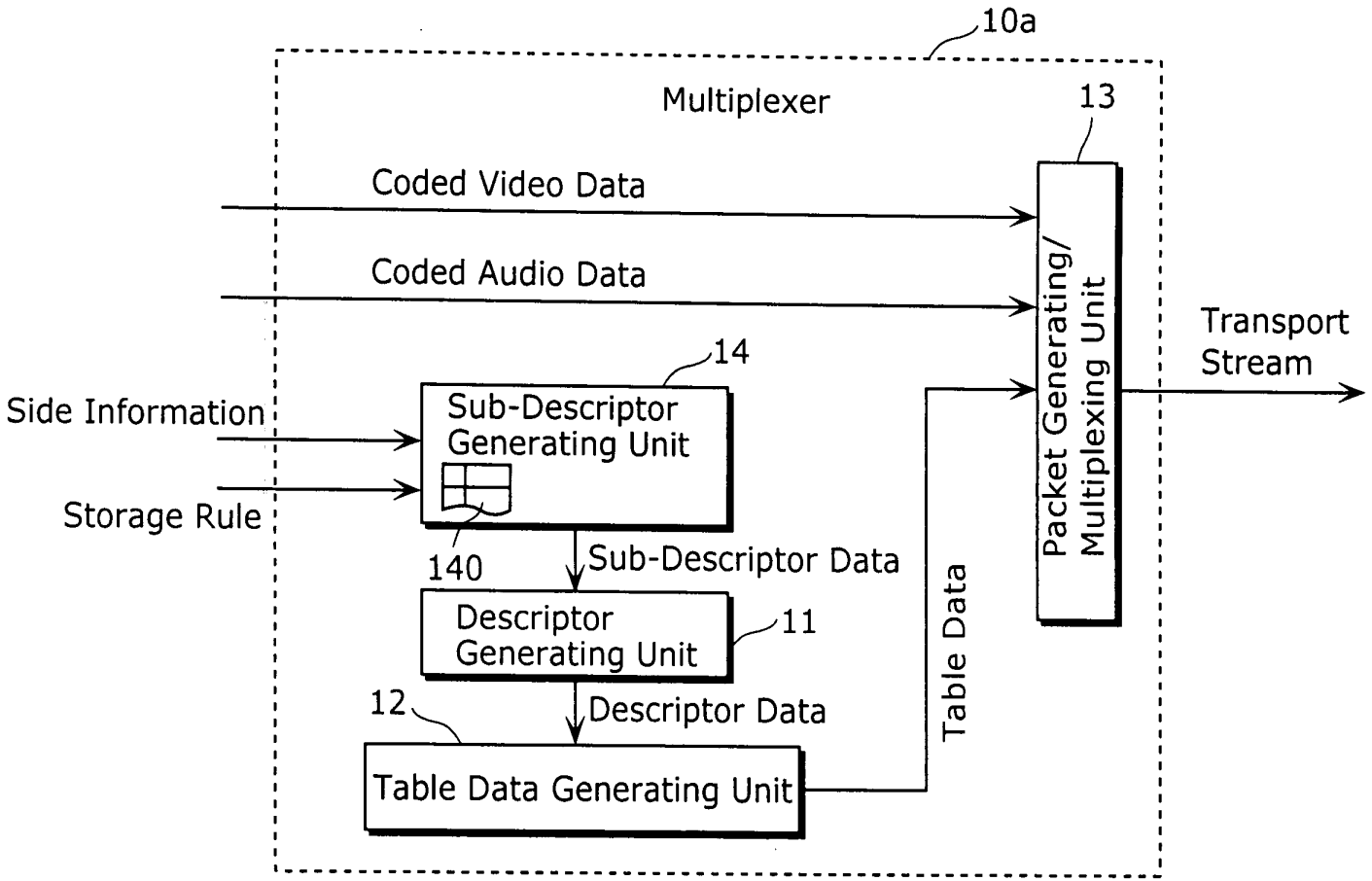

10a
Multiplexer
13
Coded Video Data
Coded Audio Data
Packet Generating/ Multiplexing Unit
Transport Stream
14
Side Information
Sub-Descriptor Generating Unit
Storage Rule
140
Sub-Descriptor Data
Descriptor Generating Unit
11
12
Descriptor Data
Table Data Generating Unit
Table Data

FIG. 11

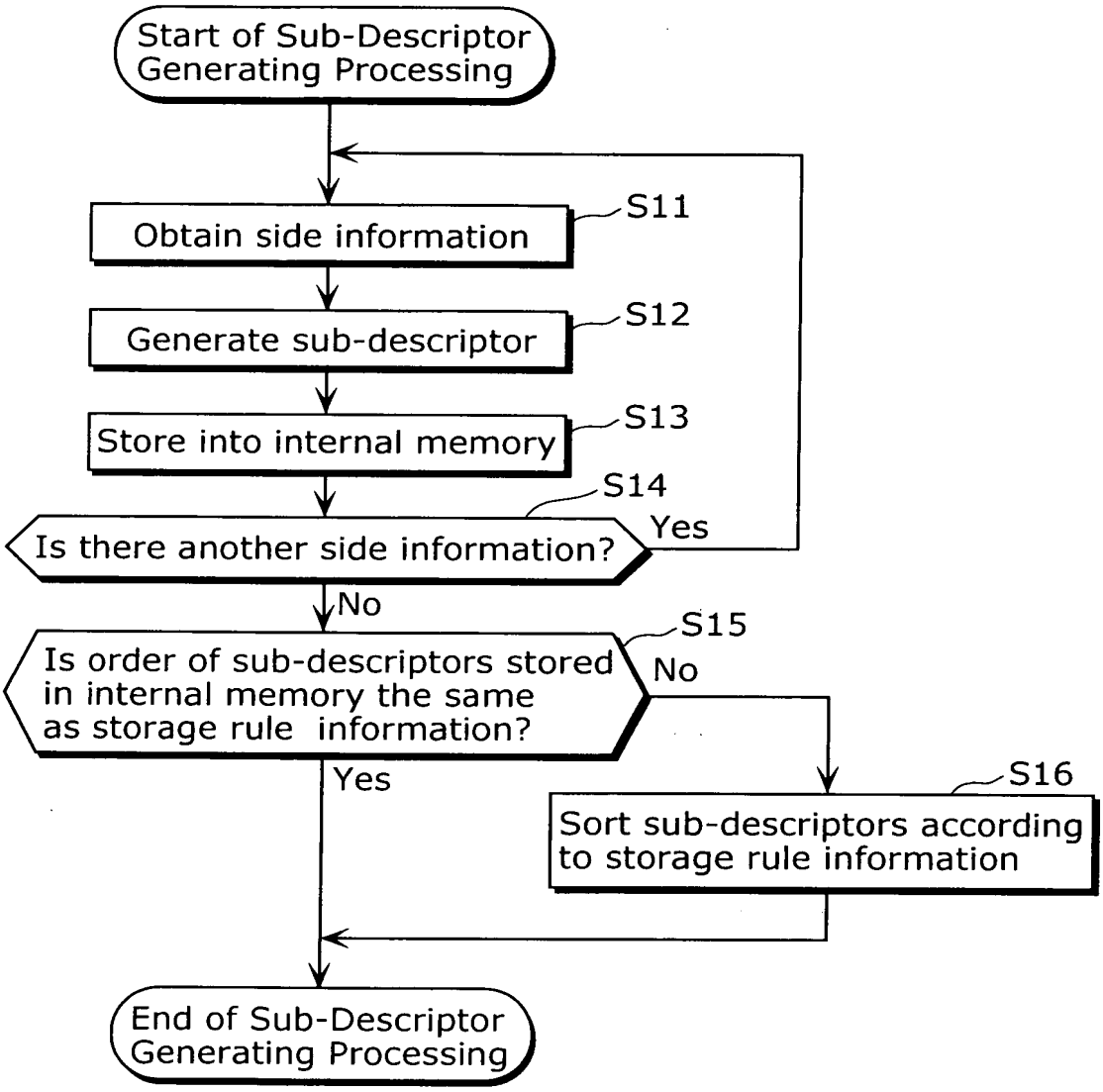
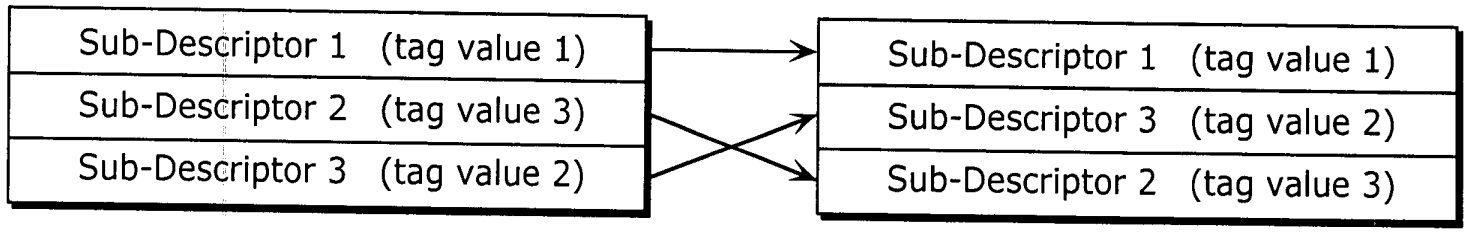

Start of Sub-Descriptor Generating Processing
Obtain side information
S11
Generate sub-descriptor
S12
Store into internal memory
S13
S14
Is there another side information?
Yes
No
S15
Is order of sub-descriptors stored in internal memory the same as storage rule information?
No
Yes
S16
Sort sub-descriptors according to storage rule information
End of Sub-Descriptor Generating Processing

FIG. 12

First Example

(a)



Second Example

(b)

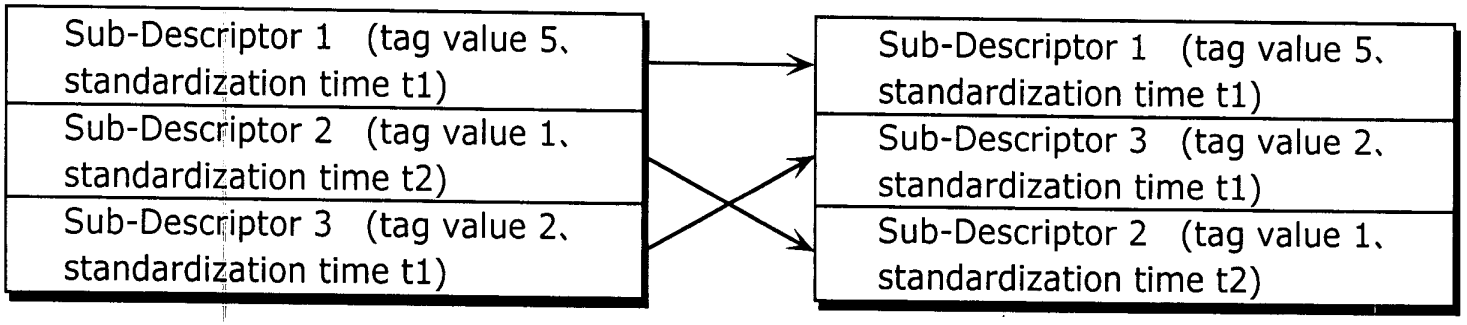


FIG. 13

Tag	Tag Value
Descriptor Length	14 bytes
Sub-Descriptor	Tag Value 0
	Side Information (regarding profile)
Sub-Descriptor	Tag Value 1
	Side Information (regarding buffer capacity of decoder)
Sub-Descriptor	Tag Value 2
	Side Information (regarding packetization)
Sub-Descriptor	Tag Value 3
	Side Information (regarding profile adding constraint)

FIG. 14

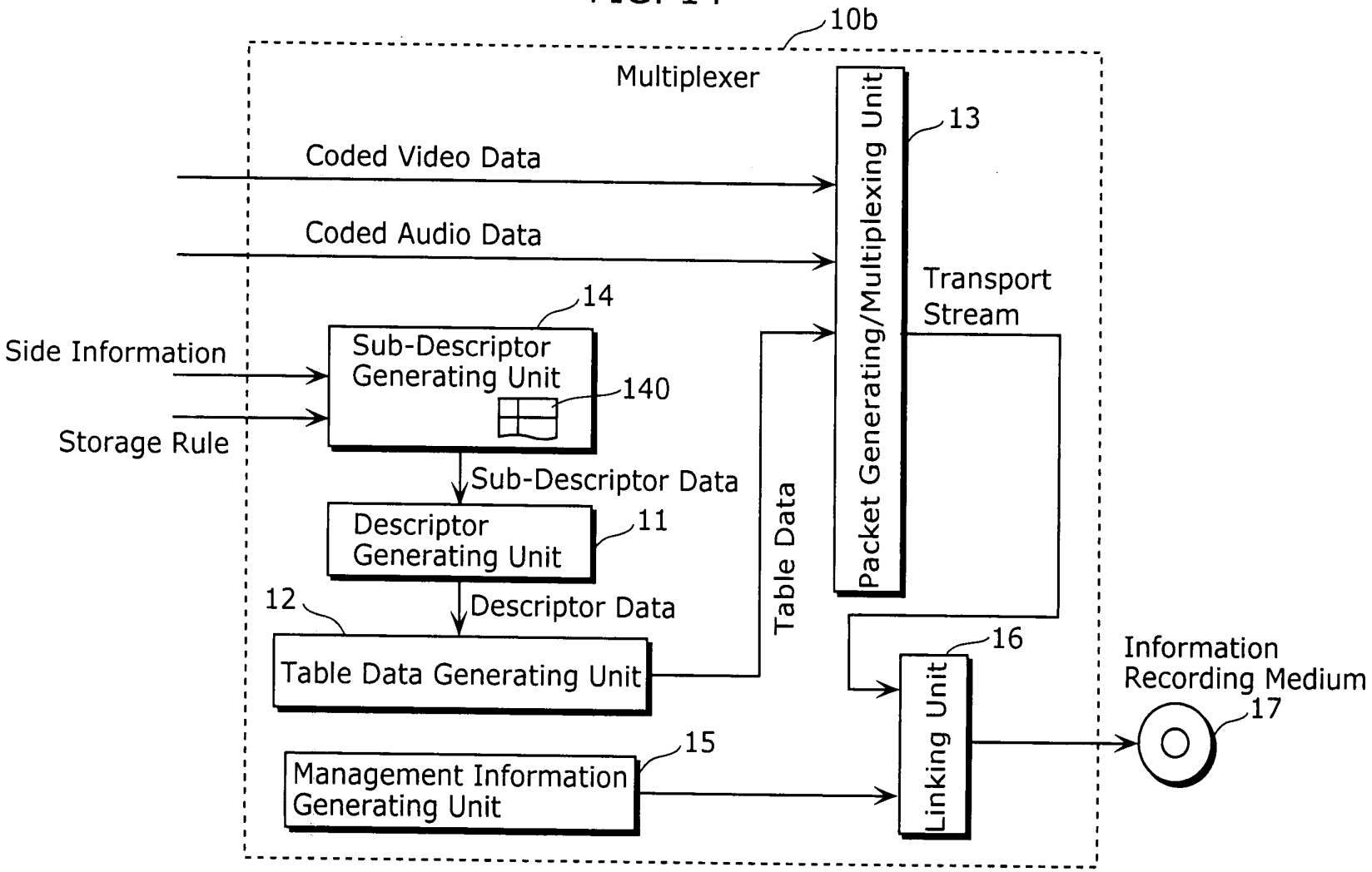

10b
Multiplexer
Coded Video Data
Coded Audio Data
Side Information
Storage Rule
14
Sub-Descriptor Generating Unit
140
Sub-Descriptor Data
Descriptor Generating Unit
11
Descriptor Data
12
Table Data Generating Unit
Table Data
Packet Generating/Multiplexing Unit
13
Transport Stream
16
Linking Unit
Information Recording Medium
17
15
Management Information Generating Unit

FIG. 15

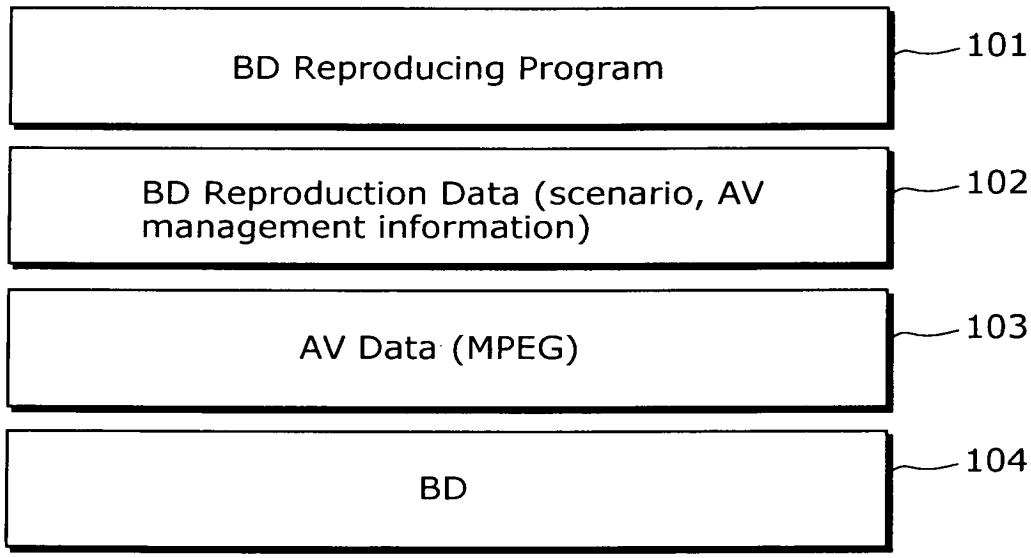

BD Reproducing Program
101
BD Reproduction Data (scenario, AV management information)
102
AV Data (MPEG)
103
BD
104

FIG. 16

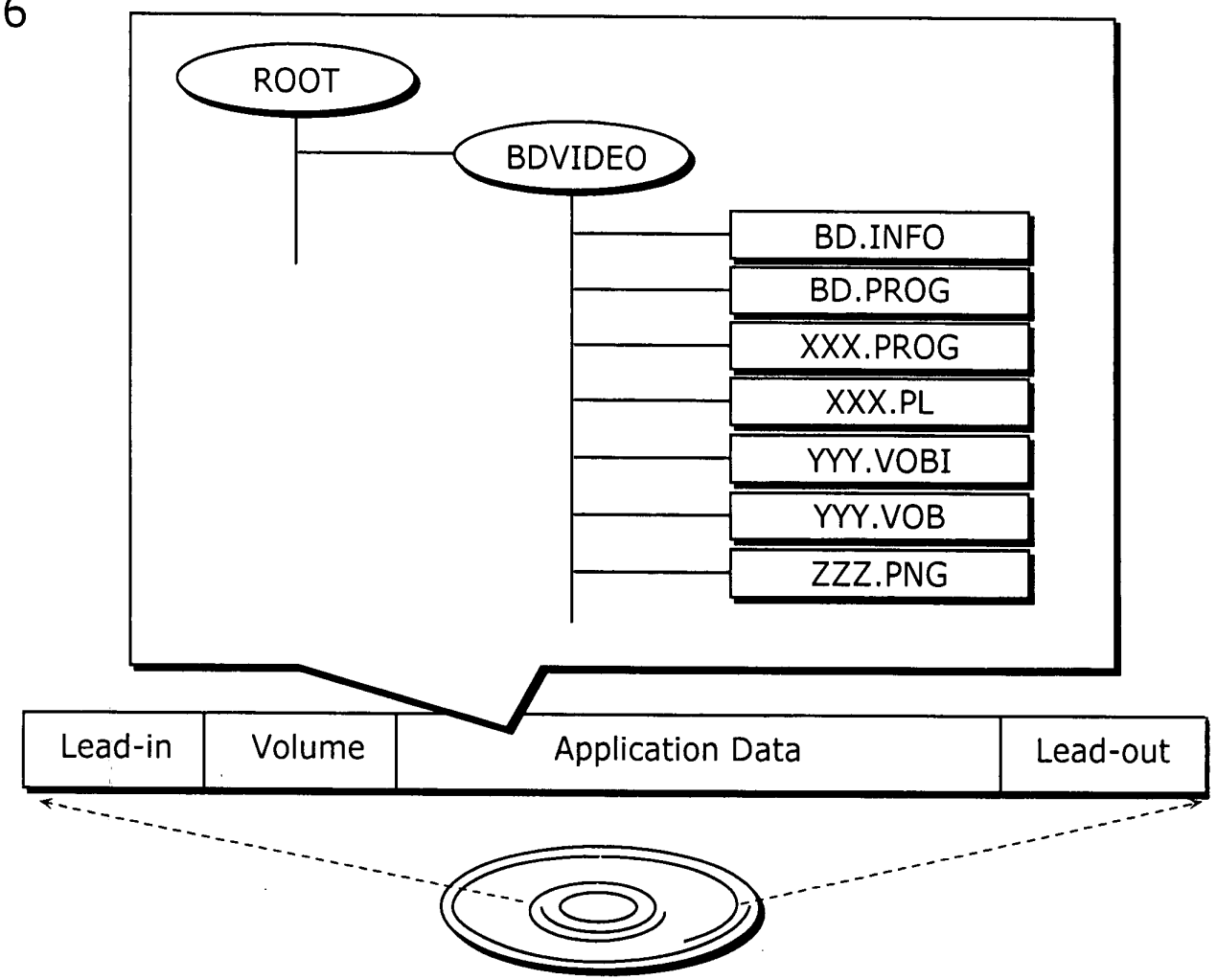

ROOT
BDVIDEO
BD.INFO
BD.PROG
XXX.PROG
XXX.PL
YYY.VOBI
YYY.VOB
ZZZ.PNG
Lead-in
Volume
Application Data
Lead-out

FIG. 17

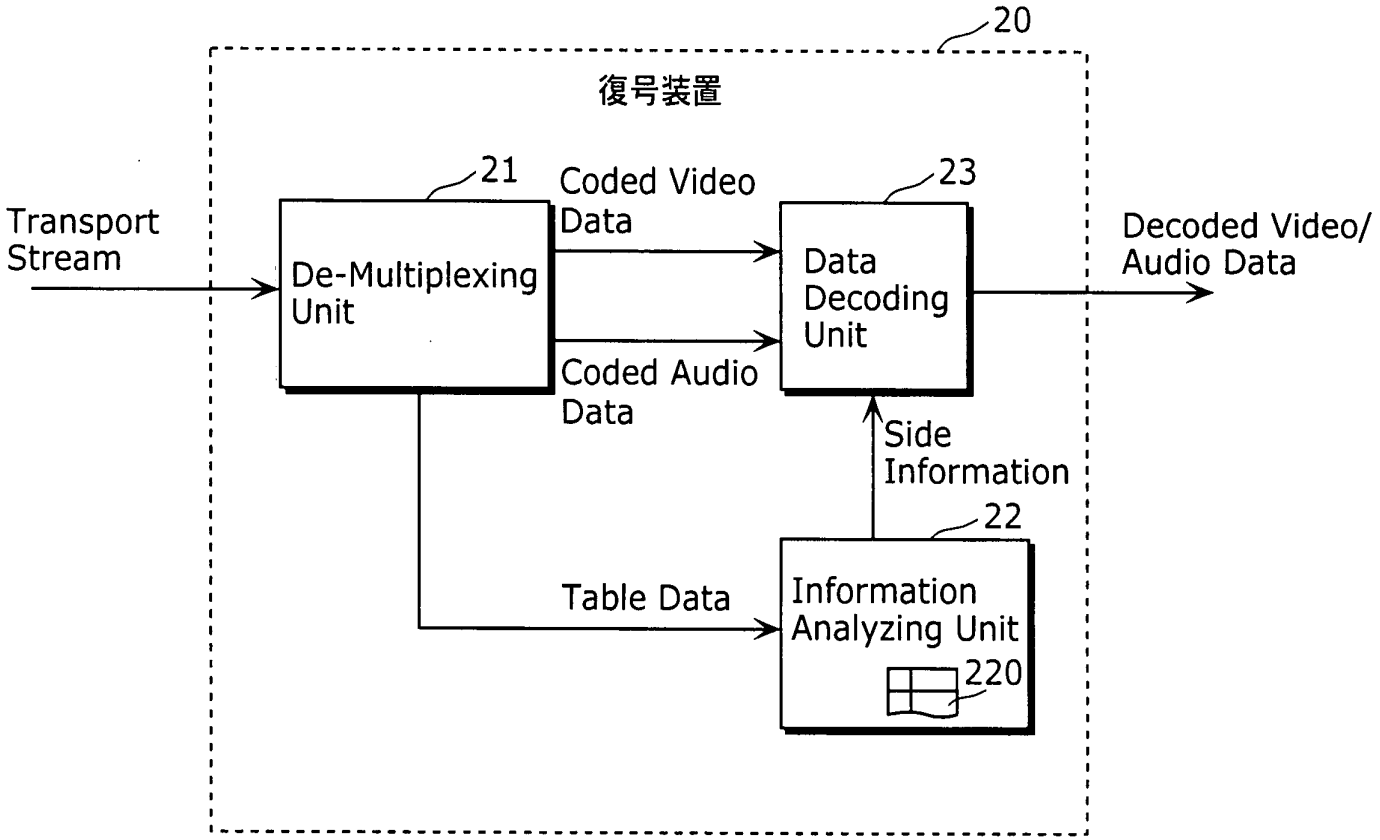
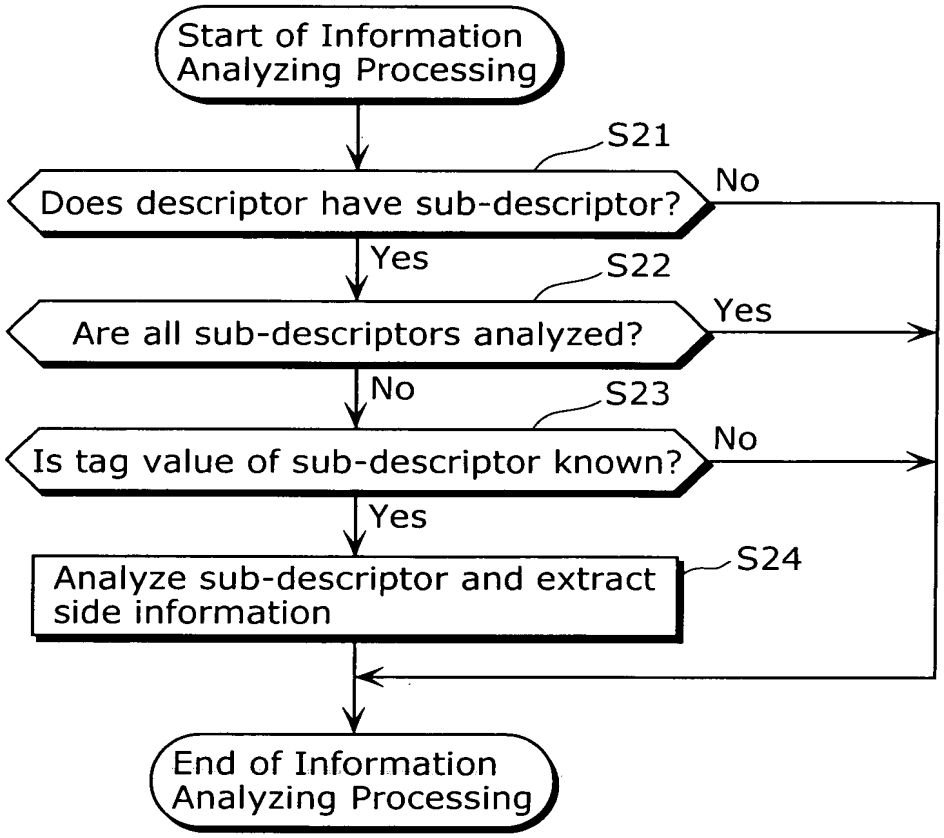

20
復号装置
21
Transport Stream
De-Multiplexing Unit
Coded Video Data
Coded Audio Data
23
Data Decoding Unit
Decoded Video/ Audio Data
Side Information
22
Table Data
Information Analyzing Unit
220

FIG. 18


Start of Information Analyzing Processing
S21
Does descriptor have sub-descriptor?
No
Yes
S22
Are all sub-descriptors analyzed?
Yes
No
S23
Is tag value of sub-descriptor known?
No
Yes
Analyze sub-descriptor and extract side information
S24
End of Information Analyzing Processing

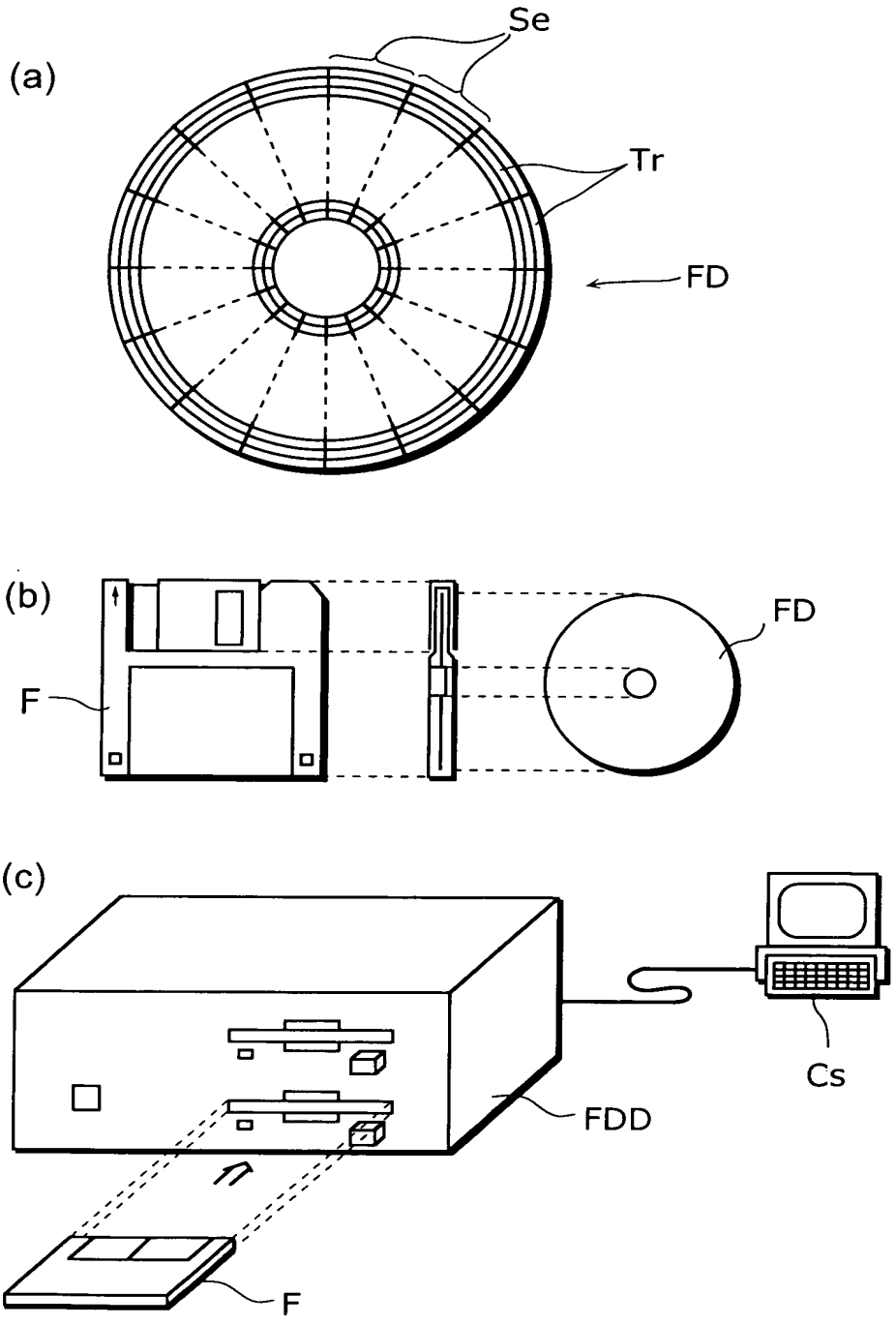



FIG. 19